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Writing about one's best possible self to influence task persistence

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Abstract

Previous research has identified a correlation between optimism and increased persistence.

Existing research also suggests that optimism can be manipulated to induce a mindset of positive outcome expectancies. Writing about and imagining one's best possible self (BPS) has resulted in an increase in an individual's positive outcome expectancies, but the effect of BPS on related constructs has yet to be examined. Thirty university students participated in a study to investigate whether participants primed with optimism using BPS would persist longer on an impossible anagram task. A t-test revealed that participants primed with BPS spent significantly longer on the anagrams than control participants. These results suggest that priming optimism using BPS can successfully bolster persistence.

Keywords: optimism; task persistence; best possible self; optimism intervention

Writing About One's Best Possible Self to Influence Task Persistence

Having an optimistic disposition has been repeatedly associated with favorable physical and psychological outcomes (Goodin & Bulls, 2013; Gallagher, Lopez, & Pressman, 2013; Carver & Gaines, 1987). Carver, Scheier, and Segerstrom (2010) describe optimism as a general mindset of favorable expectations toward the future. Optimism has been associated with high positive affect and sustained subjective wellbeing when faced with adversity (Scheier & Carver, 1992), numerous physical health benefits such reducing the probability of cardiovascular mortality in elderly subjects (Giltay, Geleijnse, Zitman, Hoekstra & Shouten, 2004), as well as many psychosocial benefits. Specifically, optimists report fewer depressive symptoms, more effective uses of coping strategies, and fewer feelings of distress when faced with adversity because of their positive future thoughts (Carver et al., 2010).

These benefits may stem from the adaptive coping strategies that are associated with optimism. Existing research supports the notion that optimists differ from pessimists with respect to how they cope with and overcome barriers. Solberg-Nes and Segerstrom (2006) noted that optimists tend to utilize approach coping in an effort to engage directly with their perceived barriers, while pessimists tend to evade potential barriers through avoidance coping. It makes sense that, when faced with adversity, optimists tend to possess more confidence in achieving a positive outcome, making them more likely to persist despite perceived barriers. In contrast, pessimists have the tendency to be more doubtful of success in adverse situations, which may hinder their overall ability to persist and follow through with their task (Scheier, Carver, & Bridges, 2001).

It is also important to note the role of positive outcome expectancies on optimistic thinking. Adhering to Scheier and Carver's (1992) definition, optimism is typically

conceptualized as a basic inclination to expect positive future outcomes rather than negative future outcomes. For example, in their research examining how dispositional optimists and pessimists evaluate life satisfaction, Busseri, Choma, and Sadava (2009) noted how optimists tend to view their past, present, and future lives in positive ways. Considering this, the present study focused on assessing changes in positive outcome expectancies as a measure of optimism.

Given the numerous positive benefits associated with optimism, many researchers have examined potential interventions to increase optimistic thoughts. Research conducted by Fosnaugh, Geers, and Wellman (2009) first demonstrated an ability to experimentally bolster an individual's optimistic orientation using the future thinking manipulation and a semantic priming task to prime positive expectancies. Building off of this research, Dilgard et al. (2012) sought to investigate whether those two optimism-inducing interventions would have the ability to influence a person's task persistence. Though their results did not reach statistical significance, their data did indicate a potential trend between optimism priming and increased persistence. Given this trend, it is plausible that a different optimism intervention may still have the ability to influence persistence.

The present study partially replicated the research conducted by Dilgard et al. (2012), but included a few noteworthy departures. Because the two interventions used by Dilgard et al. (2012) did not significantly affect persistence, the present study utilized the Best Possible Self (BPS) intervention, first used in research conducted by King (2001) to prime positive outcome expectancies. The use of the BPS intervention in numerous research studies highlights its viability as an optimism-inducing intervention. In particular, previous researchers have noted BPS to be especially successful at increasing positive future expectations (Peters, Flink, Boersma, & Linton, 2010). The BPS intervention was found to be more efficient at enhancing

positive affect than alternative interventions (Sheldon & Lyubomirsky, 2006), able to invoke positive outcome expectancies (Peters, et al., 2010), and able to induce sustained increases of optimism with daily BPS sessions (Meevissen, Peters, & Alberts, 2011). The efficacy of the BPS intervention also extends throughout diverse groups of people (i.e. students, children, adults, and individuals who are depressed or suicidal) as well as across delivery methods (i.e. handwritten, typed, drawn; Loveday, Lovell, & Jones, 2018).

The purpose of conducting the present study was to investigate whether priming optimism with the BPS intervention would influence task persistence. Many research studies have examined the efficacy of BPS as an optimism intervention, but the effect of BPS on optimism-related behaviors and cognitions such as persistence has not yet been studied.

Method

Participants

Participants included 30 undergraduate students (23 females, 7 males) from a private university in the Midwest. Participants had to be at least 18 years old to participate and ranged in age from 18 to 23 years old. Participants identified their racial background as White/Caucasian (83.3%), Black/African American (6.7%), Asian or Pacific Islander (6.7%), and Hispanic/Latino (3.2%). Participants were recruited from the School of Psychology research participant pool and received research participation credit in exchange for their time.

Materials

Positive Outcome Expectancies. Participants' positive future expectancies were measured using the Subjective Probability Task (SPT; Macleod & Cropley, 1996). The SPT consisted of 16 items and prompted participants to rate the likelihood of different experiences/events happening to them. Participants rated each item using a seven-point scale

ranging from “not at all likely to occur” to “extremely likely to occur”. Eight positive items (e.g., “You will feel confident”) were interspersed with eight negative items (e.g., “You will feel inferior”). A total score of the positive items was calculated to assess each participant’s overall positive outcome expectancies. Cronbach’s alpha for positive expectancies in this sample was .95. Previous research indicated that the SPT is sensitive to brief optimism manipulations (Meevissen et al., 2011; Peters et al., 2010).

Priming. The participants were primed using an adapted version of the BPS writing exercise (Sheldon & Lyubomirsky, 2006; Peters et al., 2010) first used in research conducted by King (2001). Participants in the experimental condition were primed with optimism by writing about and imagining their best possible selves. Participants in the control condition were primed neutrally by writing about and imagining their typical day.

Task Persistence. A series of eight anagram puzzles was given to each participant as a measure of task persistence. The anagram puzzle task used in the present study was a shortened version of the anagram task used in research conducted by Aspinwall and Richter (1999). The anagrams ranged from easy to unsolvable, with six solvable anagrams and two unsolvable anagrams. Each of the six solvable anagrams (e.g., TLANP = PLANT) had only one possible solution, and all of the anagrams were numbered and arranged in no particular order. The participant was not given an indication that any of the anagrams were unsolvable or more challenging than others. The researcher discreetly recorded the amount of time that each participant spent working on the anagram puzzle task.

Demographics. The demographics questionnaire collected non-identifying information about participants in the present study. The questionnaire asked for each participant’s gender, race, year/grade at the university, and age.

Procedure

Each participant in this study was tested individually to minimize the influence that the participants may have had on each other's level of task persistence. Additionally, upon entering the study room, participants were asked to put away all cellphones and electronic devices and to remove all watches to reduce the influence of time on the participant's persistence. To the same effect, the study was conducted in a room with no visible clock.

The participants were first given an informed consent form and asked to carefully read through it. After providing consent to participate in the study, they received the SPT to complete. The SPT was given to the participants before and immediately after the priming to serve as a manipulation check for the effectiveness of the BPS intervention. Next, participants were primed depending on the condition they were randomly assigned to. Participants assigned to the optimism condition received the BPS priming intervention and were asked to write about and imagine their best possible self. Participants assigned to the control condition were primed neutrally by writing about and imagining their typical day. Participants in both conditions followed the same format by first writing about their respective prompt for 15 minutes, and then visualizing what they wrote for an additional 5 minutes. Participants were asked to write about their prompt with as much detail as possible, and to continuously write for the entire allotted time in an effort to reduce variation in the amount of time each participant was primed for. A blank sheet of paper was provided to participants for the writing exercise and participants were free to take their writings with them at the conclusion of the study. Instructions for the participants' assigned priming condition were given both on paper and read aloud. The researcher notified the participants when the time was complete for the writing and imagery exercises.

Following the completion of the priming, the participants next completed the SPT again as a posttest measure. Participants were then given the anagram puzzle task. The researcher instructed the participants to “work on the anagrams”, and to return the anagram puzzle sheet to the researcher when the participant was “done working on the anagrams”. The specific wording of the instructions avoided using phrases such as “when you are *finished* with the anagrams” so that participants felt free to stop working on the anagrams after they had exhausted their efforts. The researcher discreetly recorded the amount time that each participant spent working on the anagram puzzle sheet. A 15-minute limit was set in place for the anagram puzzle task, and reaching this limit was considered maximum persistence. After the participants returned the anagram task to the researcher, they completed a demographics questionnaire, were debriefed, and were given credit for participation in the study.

Results

It was hypothesized that individuals primed with optimism by writing about and imagining BPS would persist longer on an impossible anagram puzzle task than individuals primed neutrally. A paired-samples t-test was conducted to determine whether the participants’ positive outcome expectancies scores significantly increased following the BPS intervention. The mean of each participant’s pretest SPT scores in the BPS condition ($M = 47.33$, $SD = 5.21$) was compared against the mean of their respective posttest SPT scores ($M = 50.00$, $SD = 4.69$) to determine whether the BPS intervention had a significant effect on positive outcome expectancies, $t(14) = 2.95$, $p = .01$. The effect size exceeds Cohen’s (1988) convention for a medium effect ($d = .54$).

A t-test was conducted to determine whether there were significant differences between the anagram times of the BPS condition and the neutral priming control condition. Consistent

with the hypothesis, participants who were primed with BPS spent significantly longer working on the anagram puzzles ($M = 9.06$, $SD = 1.17$) than participants who were primed neutrally ($M = 5.51$, $SD = 1.22$), $t(28) = 8.12$, $p < .001$. The Cohen's d value ($d = 2.97$) indicates a large effect.

Discussion

The primary purpose of this study was to investigate whether optimism priming through writing about and imagining BPS could influence an individual's subsequent persistence on an impossible anagram task. The BPS optimism intervention was compared to a control condition (i.e. writing about and imagining one's typical day) to test the ability of the BPS intervention to influence task persistence. Additionally, positive outcome expectancies were measured pre- and post-intervention as a manipulation check for the efficacy of the BPS intervention in the group that received the optimism intervention.

In the present study, the BPS intervention significantly increased positive outcome expectancies, consistent with previous research surrounding the effectiveness of BPS as an optimism intervention (Peters et al., 2010). By definition, being optimistic involves having a positive mindset and a confident outlook regarding eventual success (Carver et al., 2010). It seems reasonable then that individuals who are positive in the face of perceived difficulties and confident of eventual success are more likely to persist when faced with obstacles. The BPS intervention seems to be able to bring about this effect by increasing positive outcome expectancies. Considering this, it is plausible to assume that the higher mean anagram time for the BPS condition was the result of increased optimism.

Consistent with the hypothesis, the results suggest that optimism priming through writing about and imagining BPS can increase an individual's persistence on an impossible anagram task. Participants primed with BPS spent, on average, more than three minutes longer working

on the anagram task than control participants. These findings are in line with an explanatory framework that optimists tend to cope actively instead of avoidantly by maintaining continued efforts to solve a problem (Aspinwall & Taylor, 1992). Optimists hold favorable expectations towards the future, and because of this, eventual success should seem more probable. Given this, optimists seem to be more likely to persist when faced with obstacles (Carver et al., 1993). This framework supports the present results where participants primed with optimism persisted significantly longer than control participants. The findings in the present study extend existing literature on both optimism and persistence and suggest it may be possible to reap the benefits of optimism, in this case increased persistence, by means of the BPS writing and imagery paradigm.

This experiment was a partial replication of the procedures used by Dilgard et al. (2012) to examine the effects of optimism intervention on task persistence. The present study extended that research by examining whether a different optimism intervention (i.e. BPS) could be used to find significant increases in task persistence. When comparing the ability of multiple interventions to bolster positive affect, Sheldon and Lyubomirsky (2006) noted how participants seemed to identify more with the BPS intervention, and thus found it to be the most effective at increasing positive affect. This might explain why the present study using BPS found significant increases in persistence while previous research conducted by Dilgard et al. (2012) did not demonstrate a significant difference in task persistence between groups. The findings of the present study suggest not only a general ability to augment persistence, but also the overall ability of BPS to effectuate this. Considering all of this, individuals who utilize the BPS writing and imagery paradigm may be able to benefit from increased task persistence in many aspects of their daily lives, despite perceived difficulties or barriers.

Limitations and Future Directions

A few limitations of this study should be noted. First, the sample consisted mainly of female Caucasian college students which limits the ability of this study to extensively generalize its findings. Future research should aim to replicate findings using a more diverse sample, in an effort to determine whether the BPS intervention can have the same positive effect on task persistence for participants of different ages, sexes, and racial identities. Further, the small sample size of the study should be noted. The large effect size for the mean difference in the anagram times provides some confidence that an effect exists, but this study should be replicated with a larger sample.

Additionally, it should be noted that confounding variables that were not assessed in the present study may have influenced participants' task persistence. Particularly, individual factors such as baseline optimism, intelligence, and the ability to focus may have influenced the amount of time each participant spent working on the anagram task. For example, participants with higher intelligence may have more quickly realized that the anagrams were impossible to solve and consequently stopped the task earlier. While the use of random assignment provides some confidence that people possessing such individual factors were equally distributed across the experimental and control conditions, we are unable to determine if this is true in the present study. It would be worthy to explore how strongly these factors contribute to task persistence in future studies.

It is also important to note that the present study only examined the immediate effects that BPS has on task persistence. Future researchers could expand upon these findings to determine whether the BPS intervention can have the same effect on persistence over time. Previous research suggests the ability of repeated BPS sessions to sustain optimism over a longer period of time (Meevissen et al., 2011), so it may be worthwhile to examine this effect with

respect to persistence. Future researchers could also examine the range of potential benefits that the BPS intervention can influence, including the different behavioral and physiological benefits associated with dispositional optimism.

Conclusion

Overall, this study suggests that the BPS intervention is an effective way to increase an individual's task persistence immediately following the intervention. The findings of the present study extend existing literature by providing evidence that experimental manipulation of optimism significantly increases persistence. Although there is much research yet to be conducted surrounding BPS and its potential effects on persistence and other optimism-related constructs, the present findings suggest that utilization of the BPS writing and imagery paradigm may be advantageous for individuals looking to reap the benefits of optimism.

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